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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,949	05/01/2001	Chang Bae Yoon	A34174	4667
21003	7590	11/17/2004	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			MEW, KEVIN D	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/846,949	Applicant(s) YOON, CHANG BAE	
	Examiner Kevin Mew	Art Unit 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Drawings

1. Figure 1 and Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-2** are rejected under 35 U.S.C. 102(e) as being anticipated by Carlsson (US Publication 2001/0036188).

Regarding claim 1, a UTOPIA level interface in an ATM multiplexing/demultiplexing assembly (multi-service circuit that includes a ATM multiplexer/demultiplexier core that supports both Utopia level 1 and level 2 interfaces, see page 8, paragraph 0141, lines 1-9 and

elements 20, 60, Fig. 1) in a base transceiver station interface subsystem in an IMT-2000 radio network controller, the ATM multiplexing/demultiplexing assembly including a UTOPIA level 2 execution unit (multiplexer) (ATM multiplexer/demultiplexer core, see page 3, paragraph 0054, lines 1-11 and element 60, Fig. 1) for supporting UTOPIA level 2 (ATM core supporting Modem/Transceiver interface and services interface, which are both Utopia 2 level interfaces, see Utopia interfaces 62 and 64, Fig. 1), and executing an ATM layer function and a UTOPIA level 1 execution unit (processor) (CPU, see element 40, Fig. 3) for performing the ATM layer function (central processing unit CPU, see element 40, Fig. 1) and supporting UTOPIA level 1 (Utopia level 1 mode for Utopia interface 34 is configured by CPU at startup, see page 8, paragraph 0141, lines 1-9), the UTOPIA level interface comprising a UTOPIA interface controller (multi-service circuit, see element 20, Fig. 1) for carrying out an ATM physical layer function to interface the layers of the multiplexer (ATM multiplexer/demultiplexer core, see page 3, paragraph 0054, lines 1-11 and element 60, Fig. 1) and the processor with each other (multi-service circuit distributes ATM cells to and from CPU via interface 34, see page 2, paragraph 0046, lines 1-8) and for performing level interface between the UTOPIA level 1 and UTOPIA level 2 (multi-service circuit couples Utopia level 1 interface 34 and Utopia level 2 interface 62, see page 8, paragraph 0141, lines 1-9, page 2, paragraph 0046, lines 1-8, page 3, paragraph 0049, lines -12, and Fig. 1) to provide a 16-bit data path (it is inherent that UTOPIA level 2 interface allows transmission and reception of 16-bit data).

Regarding claim 2, the UTOPIA level interface in an ATM multiplexing/demultiplexing assembly as claimed in claim 1, wherein the UTOPIA interface controller (multi-service circuit,

see element 20, Fig. 1) includes transmission and reception FIFOs for temporarily storing data to be transmitted/received (ATM data are temporarily stored in two cells-deep FIFO in the upstream and downstream directions, see page 8, paragraph 0144, lines 1-8) between the multiplexer (multiplexer of the ATM core, see Fig. 2) and the processor (CPU, see element 60, 40, Fig. 2), and a UTOPIA level conversion/control unit (ATM core) for transmitting/receiving a UTOPIA level 2 control signal to/from the multiplexer (multiplexer of the ATM core) to allow the 16-bit data to be transmitted between the multiplexer and the transmission and reception FIFOs (Utopia level 2 interface 62 carries Transmit Data and Receive Data signals to allow data to be transmitted and received between the multiplexer of the ATM core and the two-cells deep transmission and reception FIFOs, see page 8, paragraph 0141, lines 6-9 and Fig. 2 and page 11, Table 2) and for transmitting/receiving a UTOPIA level 1 control signal to/from the processor to allow the 16-bit data to be transmitted between the processor and the transmission and reception FIFOs (Utopia level 1 interface 34 carries the Transmit Data and Receive Data signals to allow data to be transmitted and received between the CPU and two cells-deep transmission and reception FIFOs in the ATM core, see page 8, paragraph 0141, lines 6-9, and page 8, paragraph 0144, lines 1-8, and page 11, Table 5 and Fig. 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 3-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson in view of Rich (USP 5,784,370).

Regarding claims 3 & 4, the UTOPIA level interface in an ATM multiplexing/demultiplexing assembly as claimed in claim 2 discloses all the aspects of the claimed rejection set forth in the rejection of claim 2 above. Carlsson further discloses that each of the transmission FIFO and reception FIFO includes a two cells-deep FIFO (page 8, paragraph 0144, lines 1-8). Carlsson does not explicitly show the FIFO is 16-bit. However, Rich discloses a Utopia interface that carries data between ATM layer and physical layer and is operating in the 16-bit mode operation, and the FIFOs for storing transmission and reception data is 16 bits wide (see col. 6, lines 47-62 and col. 18, lines 16-41 and Fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the FIFO structure of Carlsson such that the two cells-deep FIFO becomes two FIFOs each FIFO being 16-bit wide such as the 16-bit wide FIFO in the Utopia interface taught by Rich. The motivation to do so is to allow the size of FIFO to accommodate to the 16-bit data transfer scheme of Utopia level 2 when transmitting and receiving data to and from the Utopia interface through the transmission and reception FIFOs of the ATM core.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure with respect to Utopia level interface in ATM multiplexing/demultiplexing assembly.

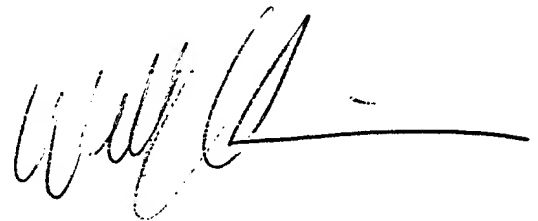
US Patent 6,256,308 to Carlsson

US Publication 2002/0097735 to Kosonen et al.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 703-305-5300. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Wellington Chin', followed by a long horizontal line extending to the right.